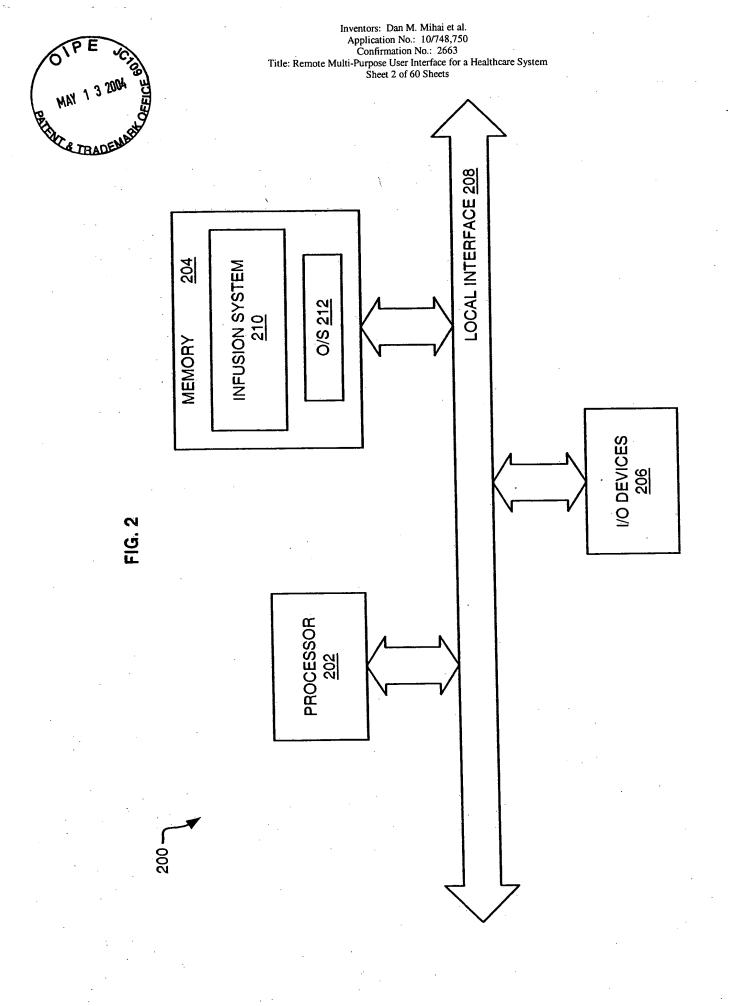
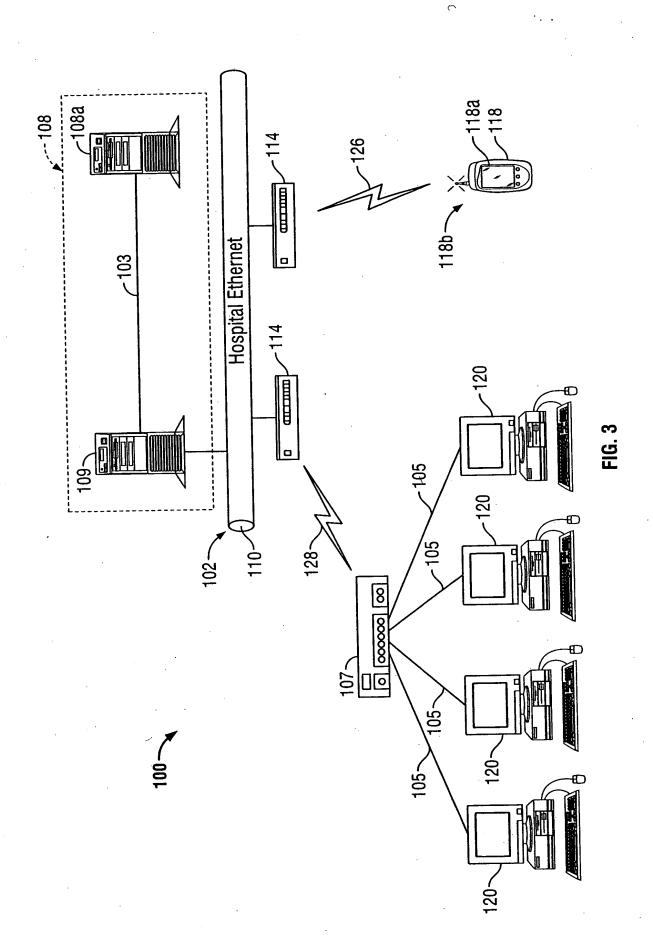
Inventors: Dan M. Mihai et al.
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Title: Remote Multi-Purpose User Interface for a Healthcare System
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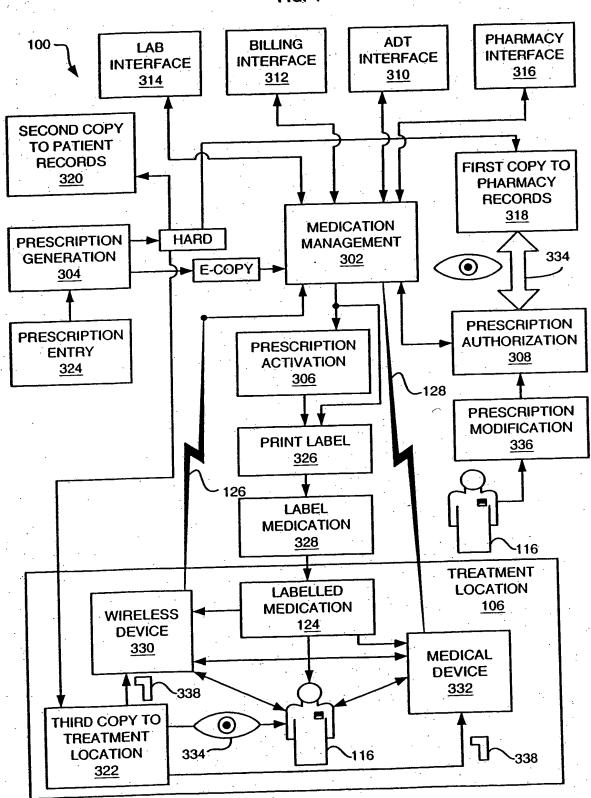


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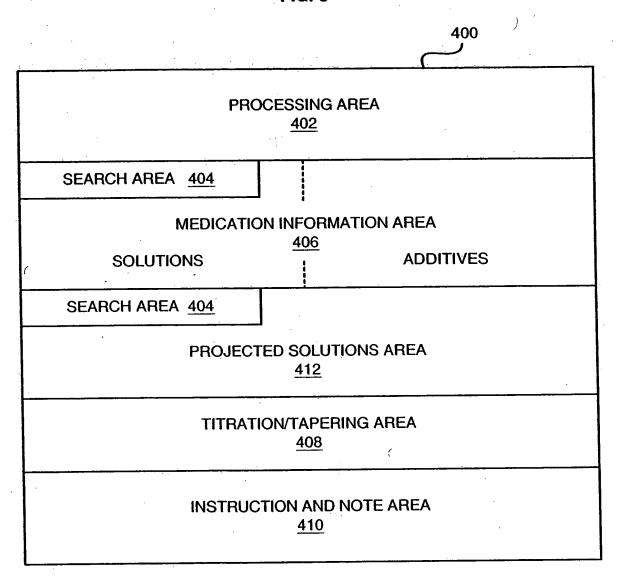
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FIG. 5



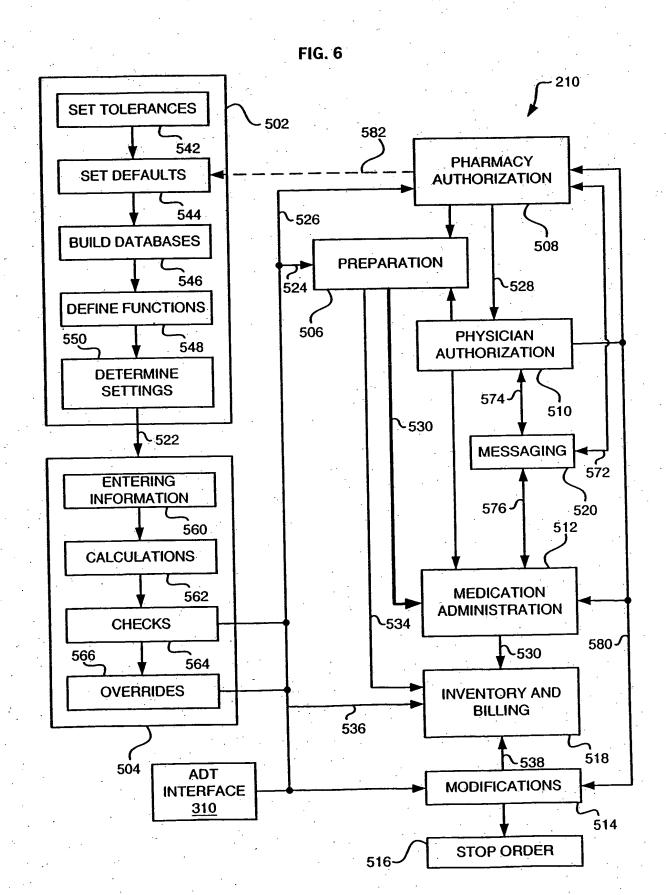


FIG. 7

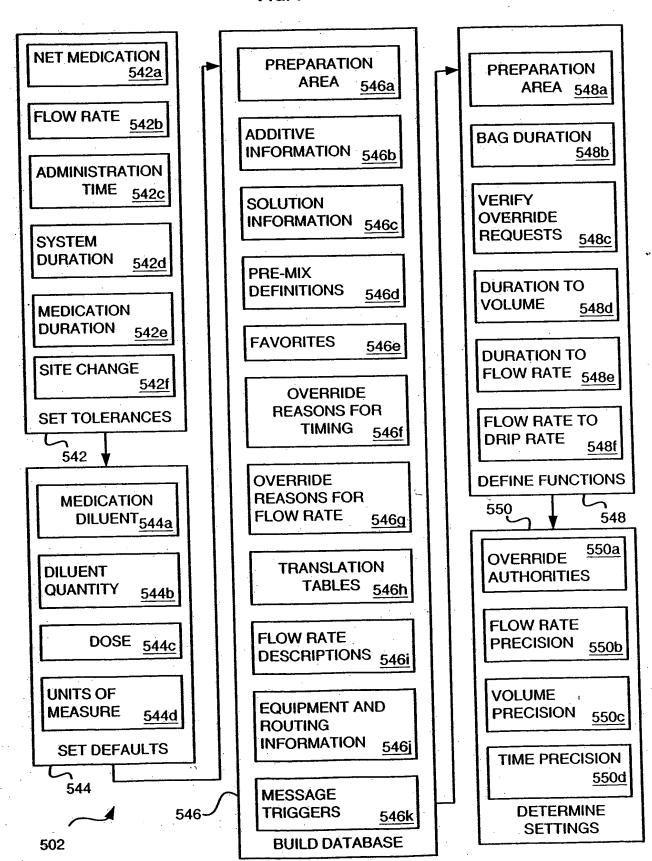
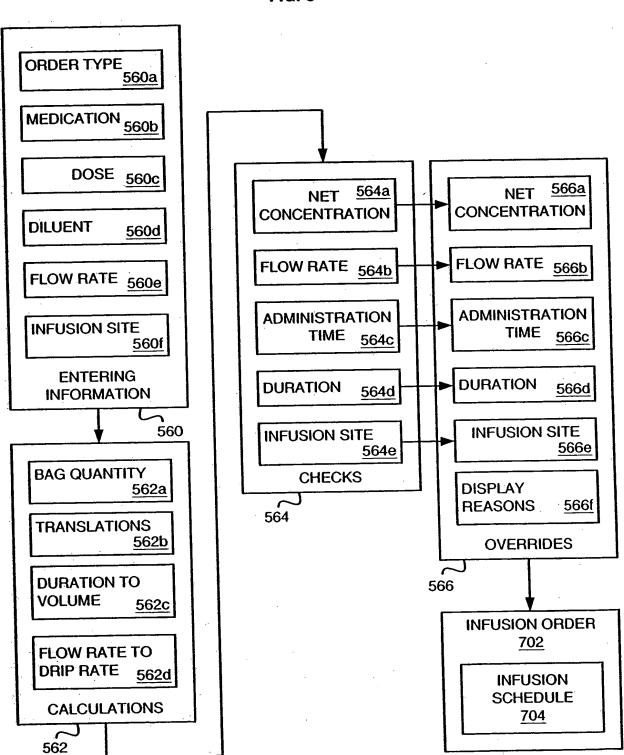


FIG. 8



Title: Remote Multi-Purpose User Interface for a Healthcare System

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FIG. 9

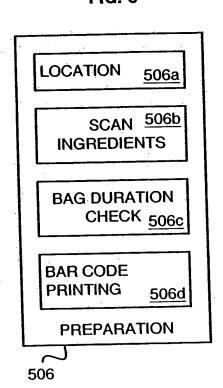
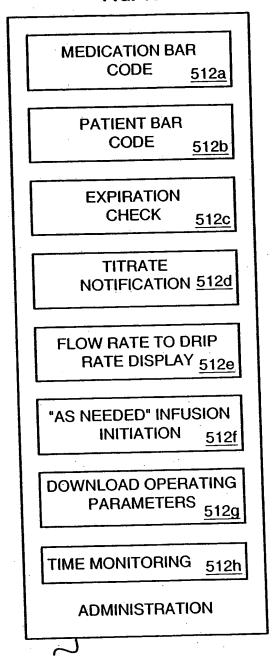
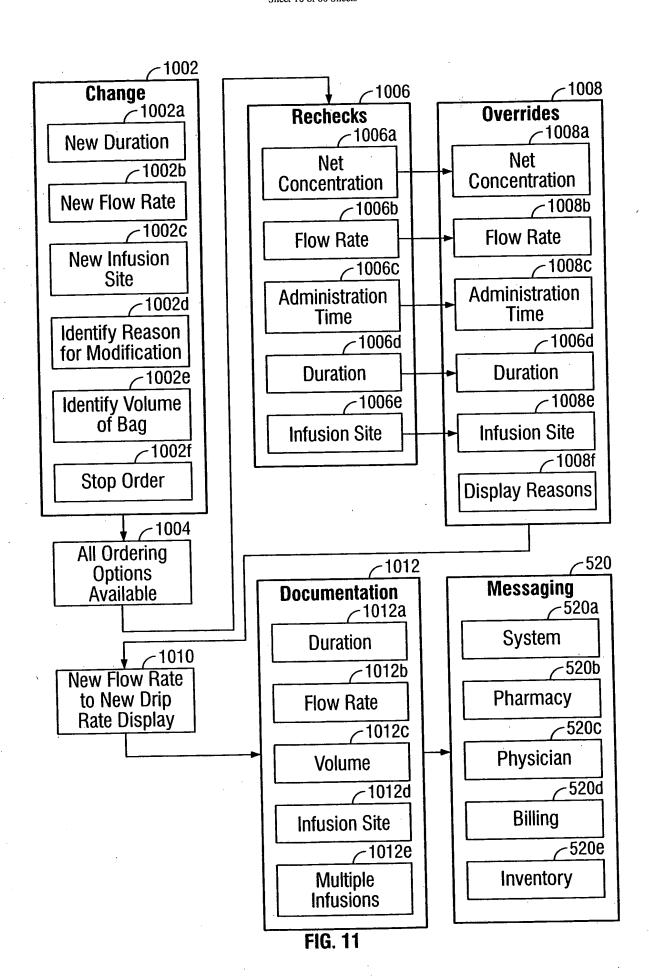
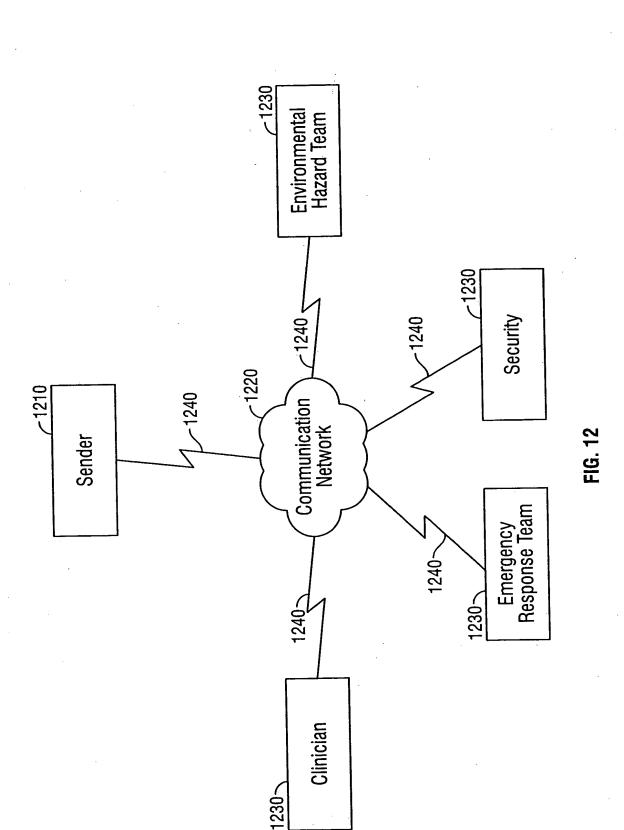


FIG. 10

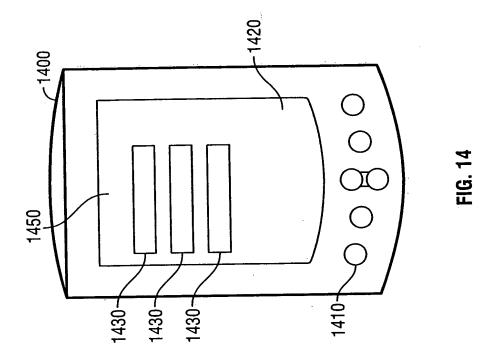


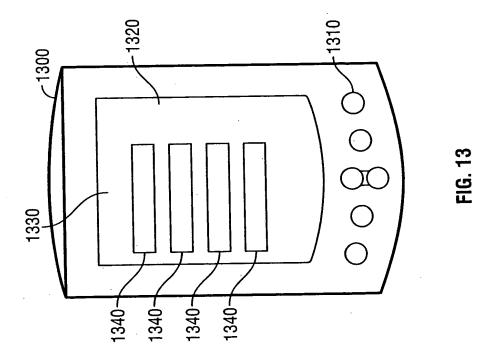
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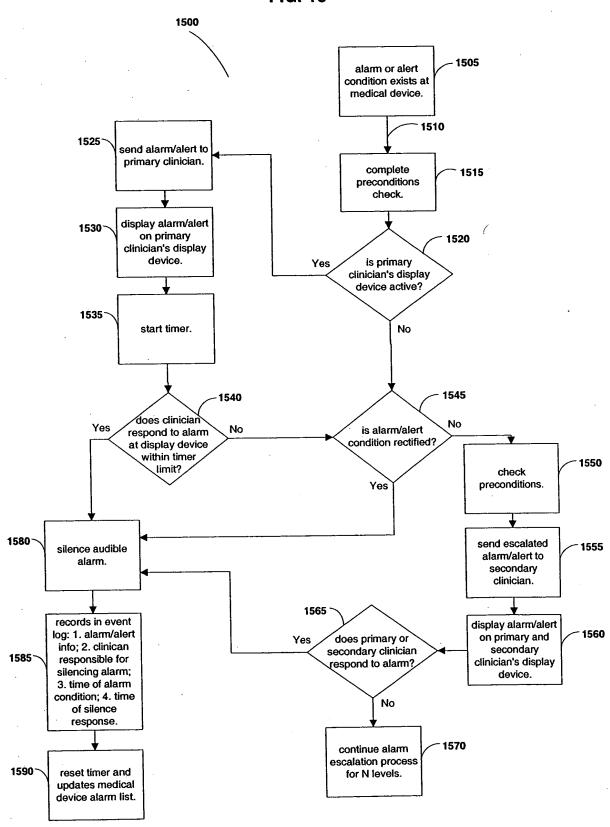




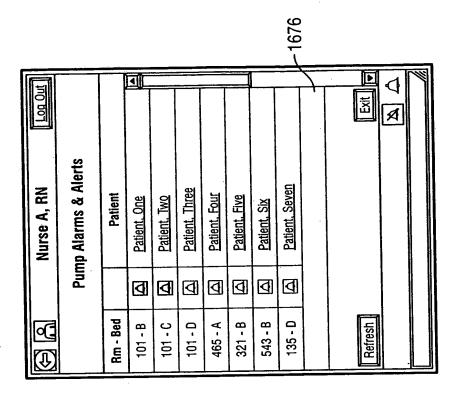
Title: Remote Multi-Purpose User Interface for a Healthcare System

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FIG. 15



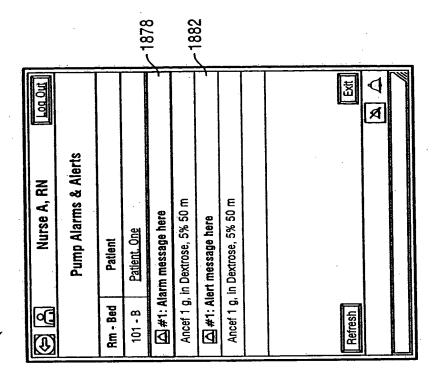
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FIG. 16A

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Pump Alarms & Alerts Nurse A, RN Ancef 1 g, in Dextrose, 5% 50 m 🛆 #1: Alarm message here Patient, One Patient 101 - B Rm - Bed

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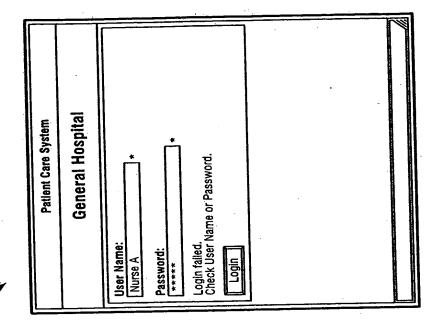
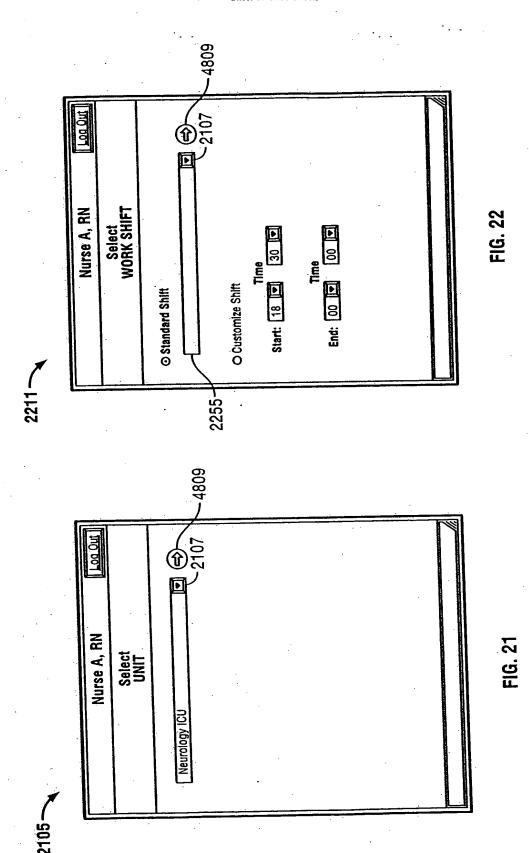


FIG. 20

General Hospital Patient Care System User Name: Password:

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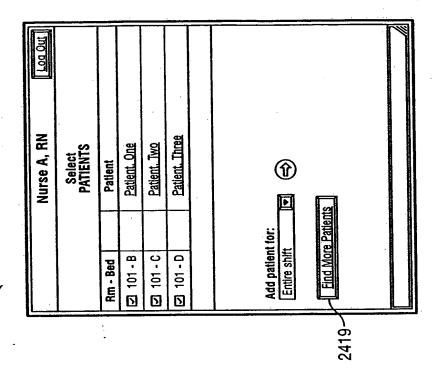


FIG. 24

1 My Tasks **Nurse A, RN** Patient, One Patient, Two Patient My Patients Scan Patient: 101 - 8 101 - C 101 - D Rm - Bed

FIG. 23

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Ninety-Three, James RN Height Ninety Nine, Douglas, Mi MDUnit1: MDRoom1 - M Dr.Ninety, Susan Mini-Chart: Allergies Allergies & Ht/Wt Date Observed Lab Results General Allergy Drug Allergy Acetaminophen 8-22 14:16

(국) A Nurse A, RN	Log Out
Patient, One - 101-B	
Mini-Chart: Allergies(NKA)	
Administer Meds/Infusions	
STOP Infusion	- ,
RESUME Infusion	
Itrate infusion	
Flow Rate History	
Pumo Status	
Remove Patient from Shift	
	<i> </i>

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Ninety-Three, James RN Ninety- Nine, Douglas, Mr. (MDLOC1) MDUnit1: MDRoom1 - MDBed1 Dr.Ninety, Susan Mini-Chart Allergies 3.6-5 mmol/L Range Allergies & HVW! Med Hx Result

FIG. 25C

ক্রি তি Ninety-Three, James RN <u>Loa Out</u>	
Se Se	
<u>Mini-Chart</u> Allergies (NKA)	
Allergies & Ht/Wt Med Hx	
All © Scheduled O PRN O Look Back Period: 24	
Order	
Acetaminophen Cap 500 MG 500 MG = 1 CAP Oral	
TID Admin Date: 6-3 12:53 Patient Refused	l
Back	

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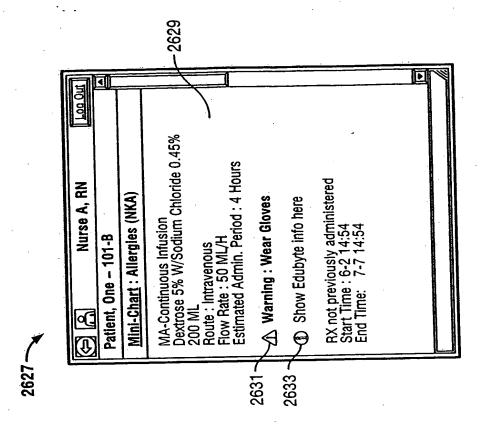


FIG. 26A

12-9 2:00 Last 12:19 -> Continuous Infusion (De Continuous Infusion (De Nurse A, RN Continuous Infusion Mini-Chart: Allergies (NKA) MORPHINE SUL Continuous Infus SCHED 13 Patient, One - 101-B <- 10:19 1 Med 15:30 17:30 11:30 13:30 Time E 邕 0 0

FIG. 26

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WORKFLOW INFUSION: STOP
Ninety-Six, Samuel, Mr. MDRoom1Ninety-Six, Samuel, Mr. MDRoom1MDBed1
Mini-Chart: Allergies
Continuous Infusion
Dextrose Inj 20%
500 ML
Route: Intravenous Flow Rate: 125
ML/H
Estimated Administration Period: 4
Hours
Please select a reason for Stop
infusion
Discontinue order in system
Stop Time [M/D/Y HH:MM]
Cancel
Stop Time [M/D/Y HH:MM]

FIG. 27B

1G. 27A

2727a-

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WORKFLOW INFUSION: RESUME
Ninetyfour-Pointlive, Fred, Mr.
MDRoom1 - MDBed1
Mini-Chart: Allergles (Not Specified)
Continuous Infusion
Dextrose Inj 20%
500 ML
Route: Intravenous Flow Rate:
125 ML/H
Estimated Administration Period:
4 Hours
Stopped w/o Order
Please select a reason for Resume
Infusion
Site re-established T

11G 27D

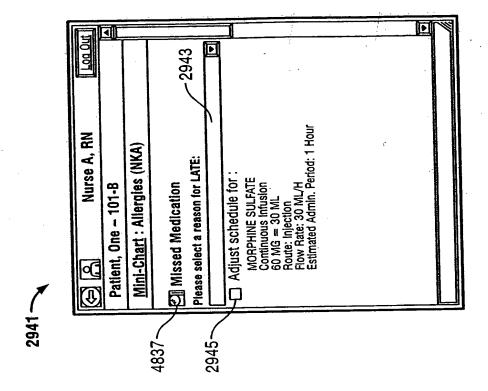
2727d —

WORKFLOW INFUSION: RESUME
Ninetyfour-Pointlive, Fred, Mr.
MDRoom1 - MDBed1
Mini-Chart; Allergies (Not Specified)
Scan Item: (A) (A)
Scan Item: (A)
Scan Item

16. 270

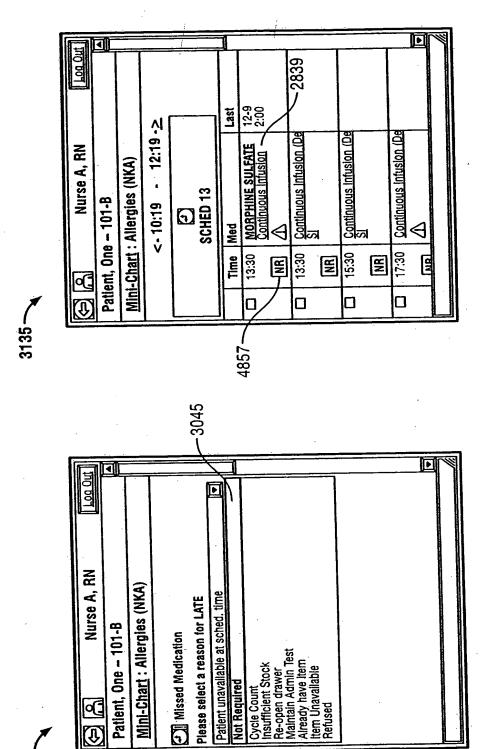
Inventors: Dan M. Mihai et al.
Application No.: 10/748,750
Confirmation No.: 2663
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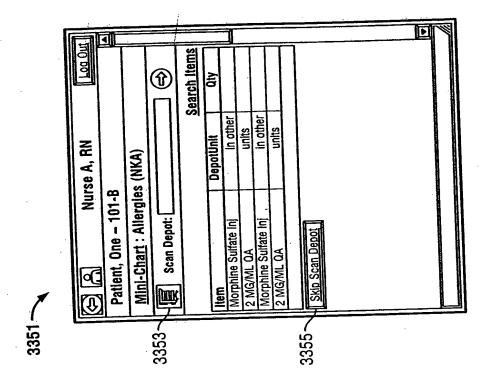
Last 12:19 -2 Continuous Infusion (D Nurse A, RN Continuous Infusion Mini-Chart: Allergies (NKA) <- 10:19 **-**SCHED 13 Patient, One - 101-B 13:30 17:30 15:30 Time 13:30

Title: Remote Multi-Purpose User Interface for a Healthcare System Sheet 25 of 60 Sheets



Title: Remote Multi-Purpose User Interface for a Healthcare System

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12/9 2:00 Last Continuous Infusion (De SI Continuous Infusion (De Continuous Infusion (De MORPHINE SULFATE Continuous Infusion Nurse A, RN SCHED 13 Med 17:30 13:30 15:30 11:30 Time R. E 0 0 0

FIG. 32

Title: Remote Multi-Purpose User Interface for a Healthcare System Sheet 27 of 60 Sheets

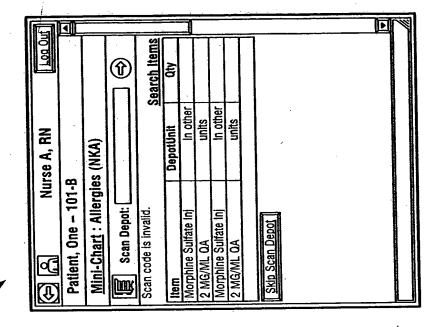


FIG. 35

Nurse A, RN Mini-Chart: Allergies (NKA) - MORPHINE SULFATE
Continuous Infusion
60 MG = 30 ML
Route: Injection
Flow Rate: 30 ML/H
Estimated Admin. Period: 1 Hour Warning: Wear GlovesA Show Edubyte Info here Patient, One - 101-8 Scan Item: Quantity: 30 Get: 30 ML

Title: Remote Multi-Purpose User Interface for a Healthcare System

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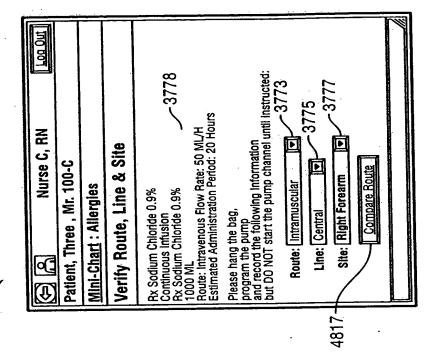


FIG 37

<u>:1G. 36</u>

Patient, One – 101-B

Mini-Chart: Allergies (NKA)

Scan Patient:

3661

Not Req Due to Monitoring Result

Patient Unavailable
Refused

Waste/Return

3657-

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Retient, Three, Mr. 100-C

Mini-Chart: Allergies

Scan Pump Channel

Rx Sodium Chloride 0.9%
Continuous infusion
Rx Sodium Chloride 0.9%
1000 ML.
Route: Intravenous Flow Rate: 50 ML/H
Estimated Administration Period: 20 Hours

Scan Pump Channel ********** 🚓 4809

∆86 31:

3885

Relect Pump Channel Mode

Rx Sodium Chloride 0.9%
Confinious Intiston
Rx Sodium Chloride 0.9%
Tooo Min.
Rx Sodium Chloride 0.9%
Too Min.
Rx Sodium Chloride 0.9%
Tooo Min.
Rx So

FIG. 38

Title: Remote Multi-Purpose User Interface for a Healthcare System

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Rm - Bed 101-B
Rm - Bed 101-B
Dr. One (111)111-1111 ext. 1
Pharm & Pump Comparison
Ancel 1g, in Dextrose, 5% 50 mL
run at 100 mL/hr
Rate 100 mL/hr 100 mL/hr
Comparison MATCHES.
Press "Start" Key on pump.

FIG. 39A

Patient, Three, Mr.

1 West: 100-C
MD1, Test
Period: 20 House Channel and:
Period: 20 House Channel and:
Period: 20 House Channel and:

> If this is a PRIMARY Cilick COMPARE below Now and wait until instructed to start pump channel.

> If this is a PIGGYBACK -Press the "star" key on the pump channel.
Program the Pump Now then Cilick COMPARE pump Now then Cil

FIG. 39

3986

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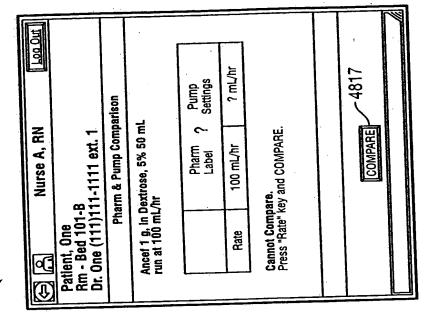
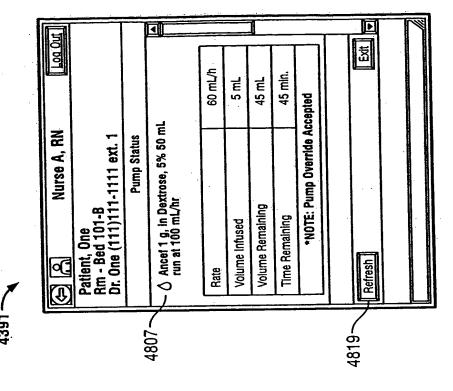


FIG. 41

4825 Please Verify with PHYSICIAN Order.
Then to accept the mismatch, press "Start" key on pump and then click "OK" below.
You can also reprogram the pump and then click "Compare again." 481 50 mL/hr Compare again Pump Settings Pharm & Pump Comparison Ancef 1 g, in Dextrose, 5% 50 mL run at 100 mL/hr # Nurse A, RN Patient, One Rm - Bed 101-B Dr. One (111)111-1111 ext. 1 Pharm Label 100 mL/hr Ж Rate

Title: Remote Multi-Purpose User Interface for a Healthcare System Sheet 32 of 60 Sheets



Cannot Compare. Press "Start" key on pump and click COMPARE, to retry compartson. ? mL/hr 4817 Pump Settings Pharm & Pump Comparison Ancef 1 g, in Dextrose, 5% 50 mL run at 100 mL/hr Nurse A, RN Patient, One Rm - Bed 101-B Dr. One (111)111-1111 ext. 1 Pharm Label 100 mL/hr Rate

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Communication Loss Alert for the following Patients If a Yellow light is flashing on the WIRELESS MODULE and it is beeping, the system may be down. Call IT or Biomed. Plug in and turn on all pumps. If that does not resolve the problem, Call IT or Blomed. Nurse A, RN Patient, Three **Patient** Patient, Two Patient, One Trouble Shooting Tips: X X X Rm - Bed - OR -101 - D 101 - B 101 - C

FIG. 45A

G. 44

Patient, One
Rm - Bed 101-B
Dr. One (111)111-1111ext. 1

Flow Rate History

Ancet 1 g, in Dextrose, 5% 50 mL
run at 100 mL/hr
60 mL/h @ 10:55 AM 3/13
70 mL/h @ 10:55 AM 3/13
80 mL/h @ 10:54 AM 3/13

Refresh

Refresh

Title: Remote Multi-Purpose User Interface for a Healthcare System
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| Composition |

FIG. 46

4603~

Communication Loss Alert
for the following Patients

Trouble Shooting Tips:
If a Yellow light is flashing on the WIRELESS MODULE and it is beeping, the system may be down. Call IT or Blomed.

ORPlug in and turn on all pumps, if that does not resolve the problem, Call IT or Blomed.

Call IT or Blomed.

FIG. 45B

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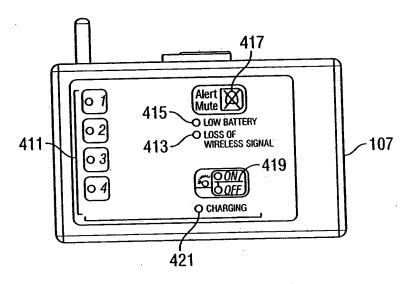


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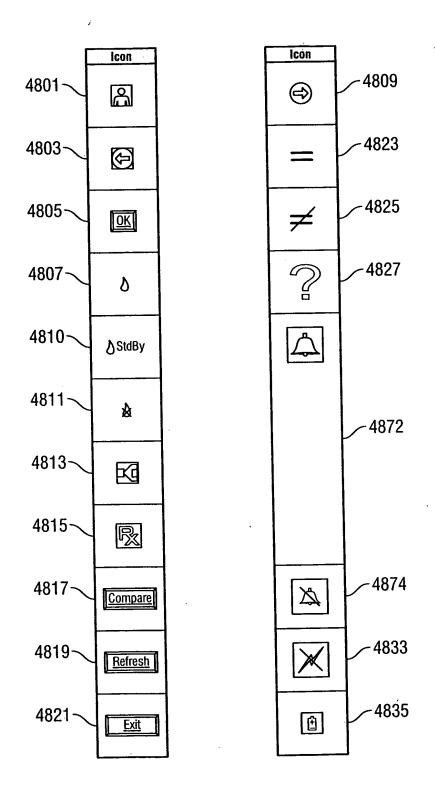
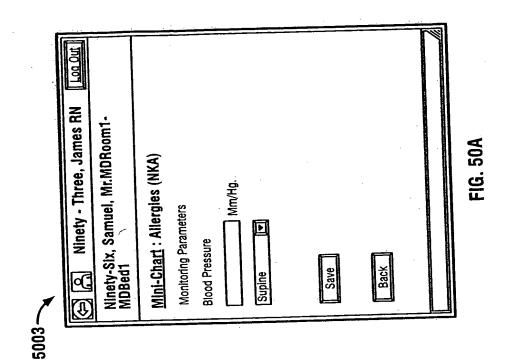
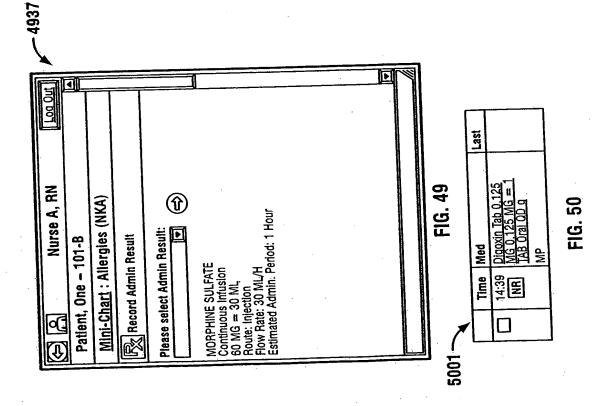


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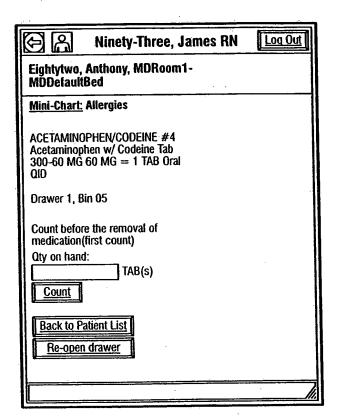
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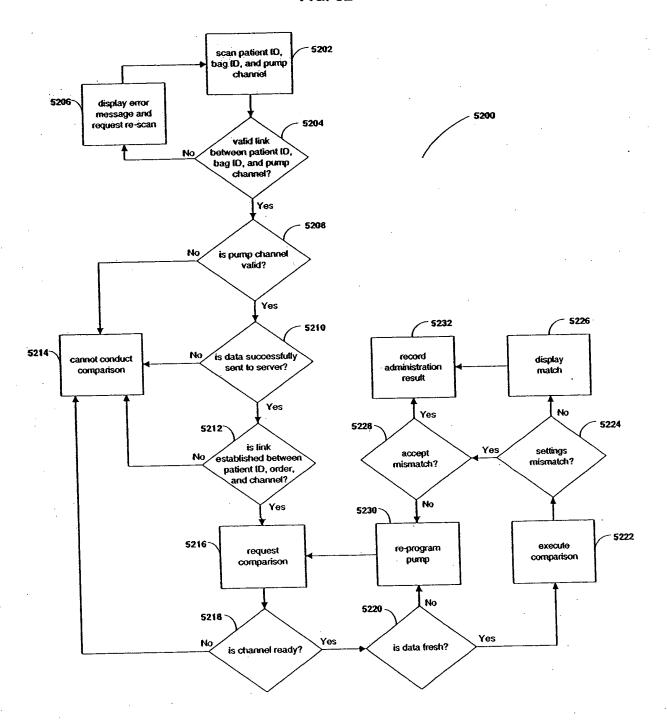
5101-

FIG. 51

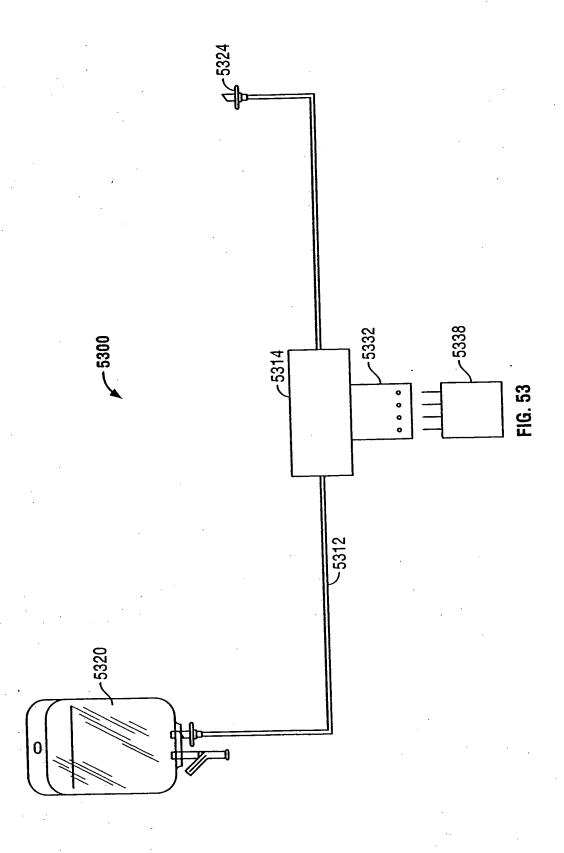
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FIG. 52



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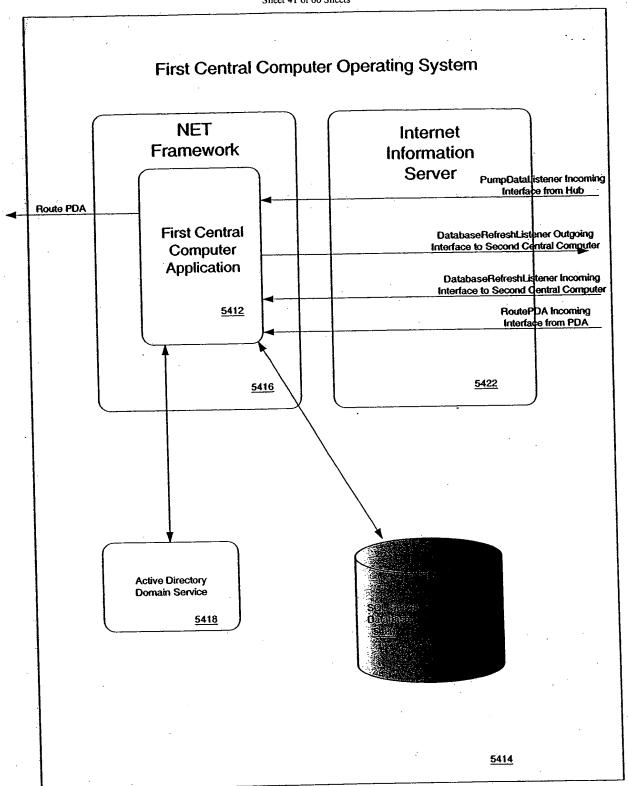
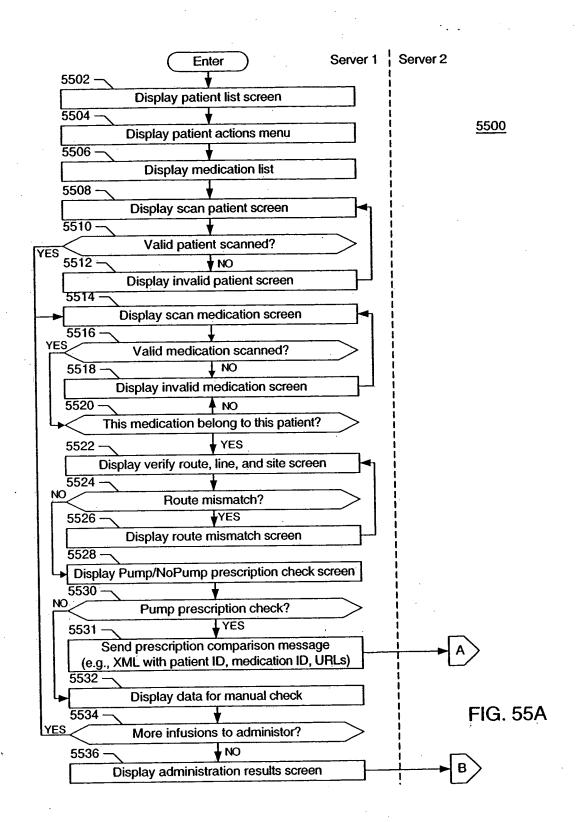


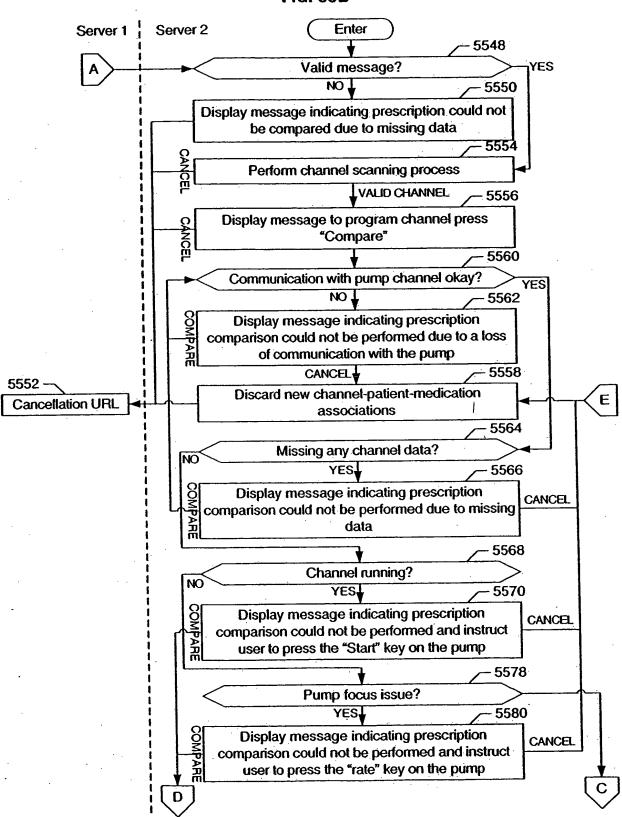
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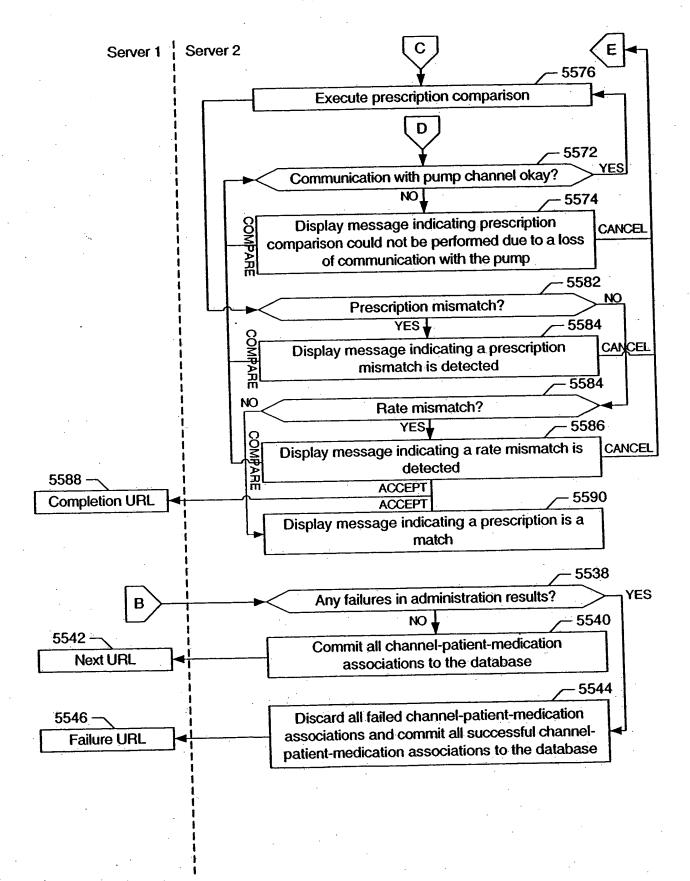
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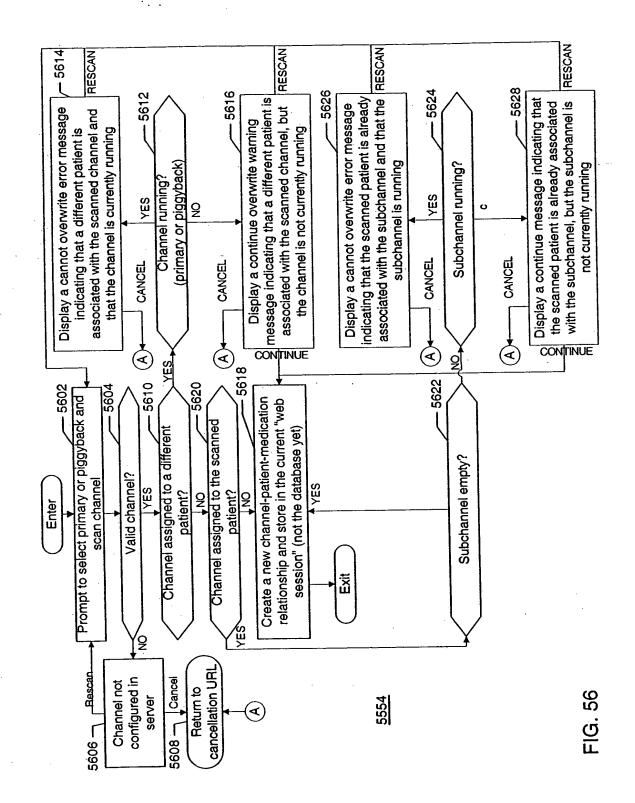
FIG. 55B

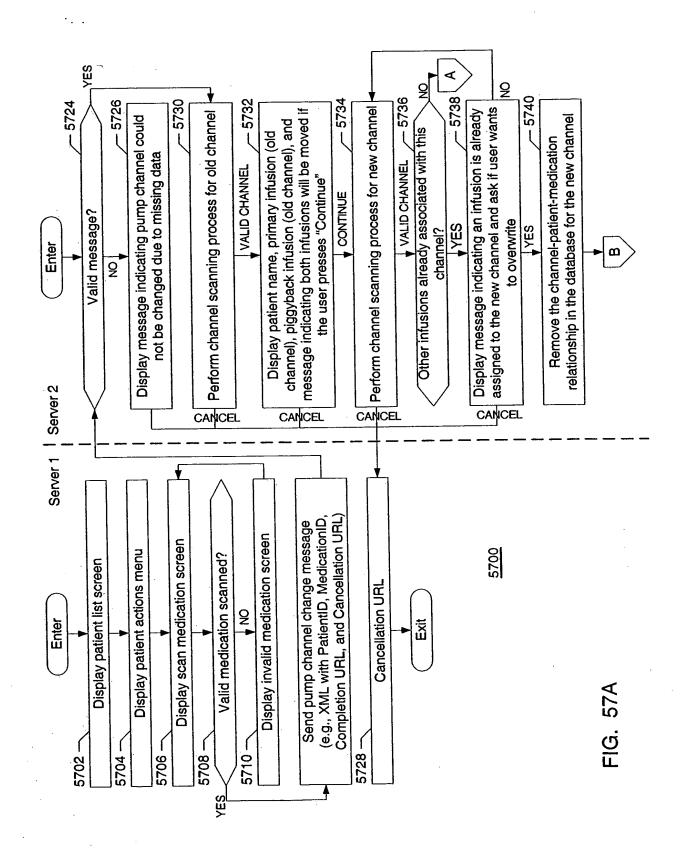


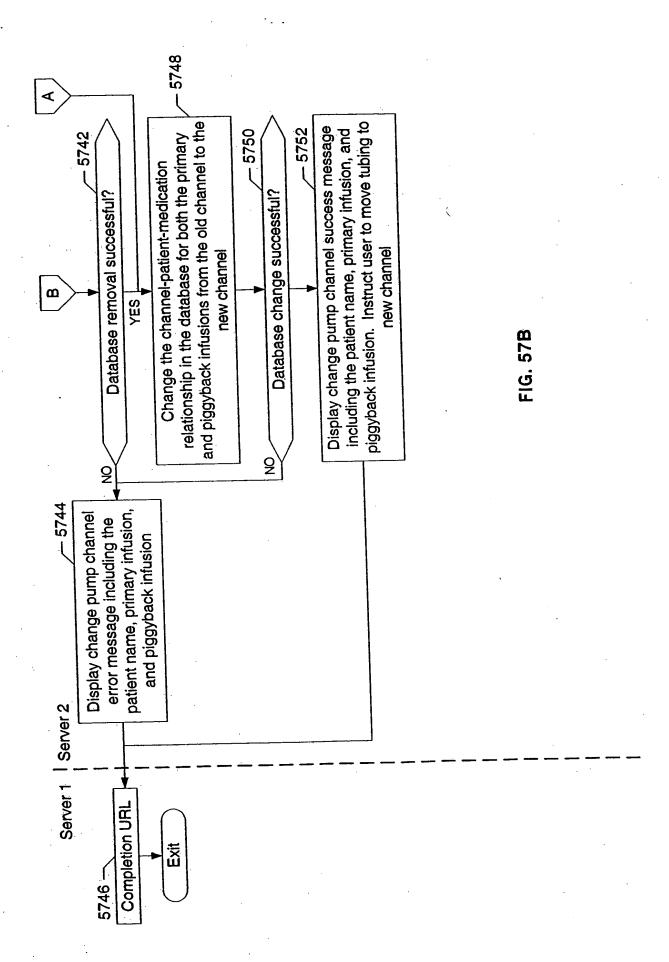
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FIG. 55C









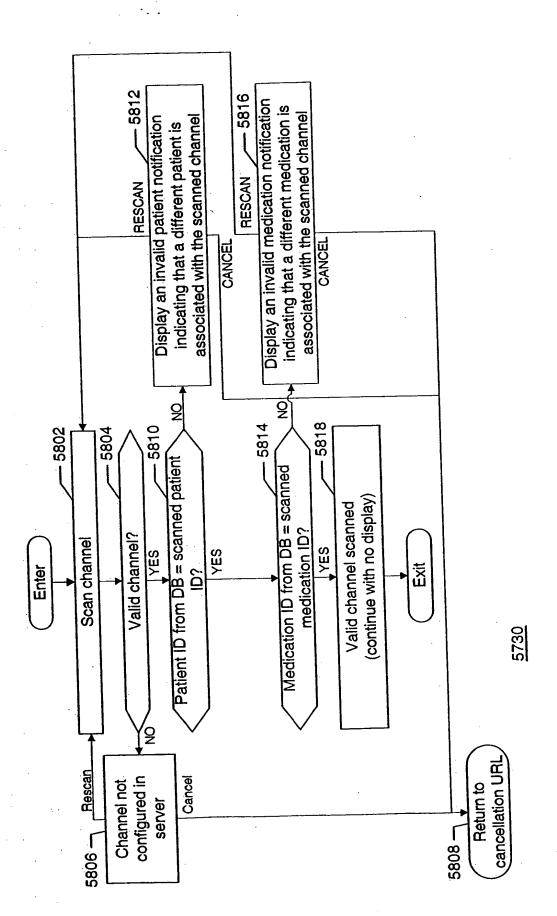
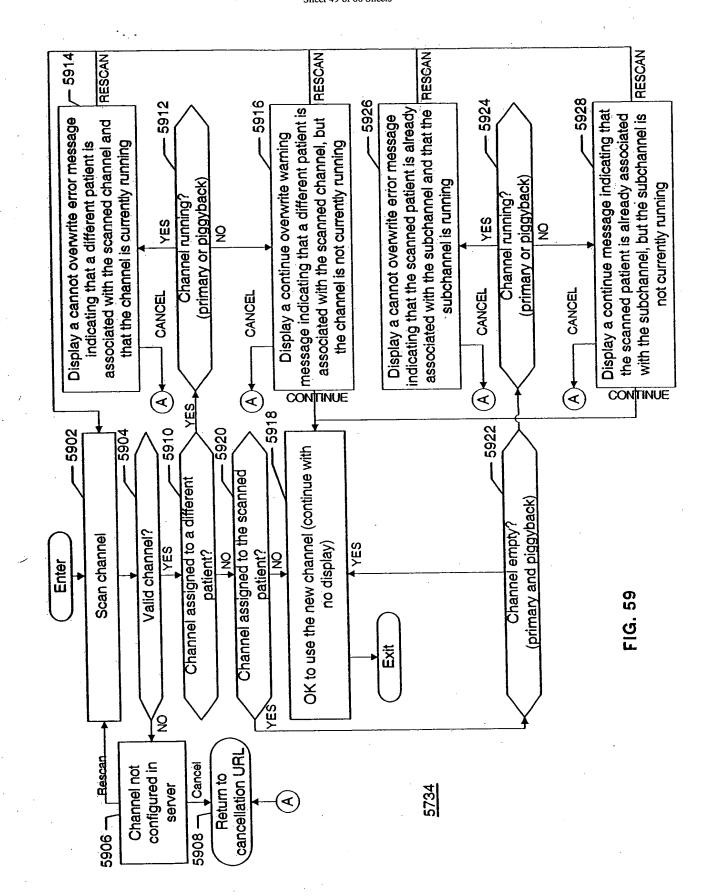
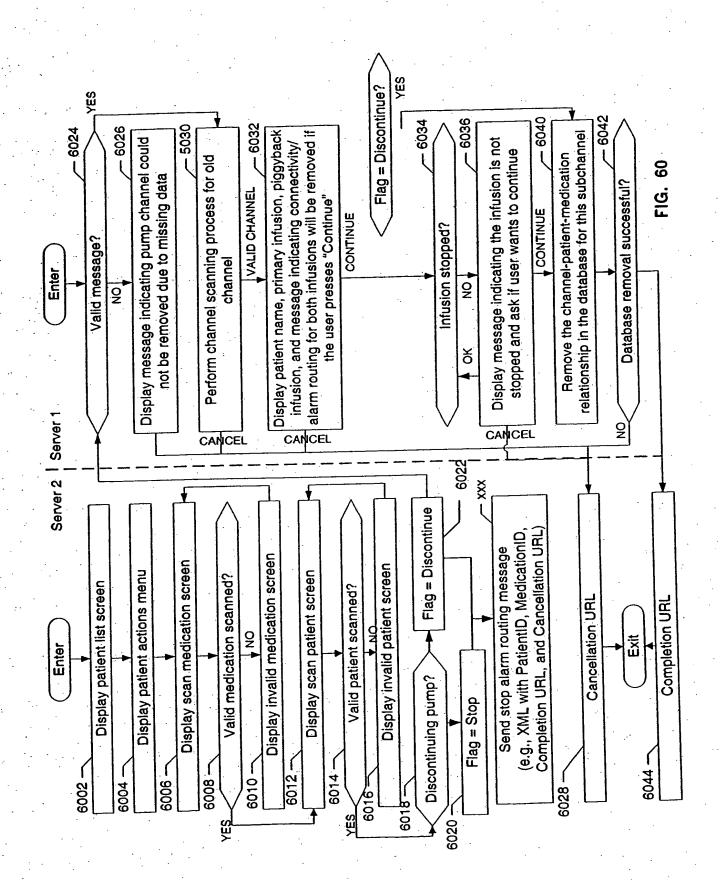


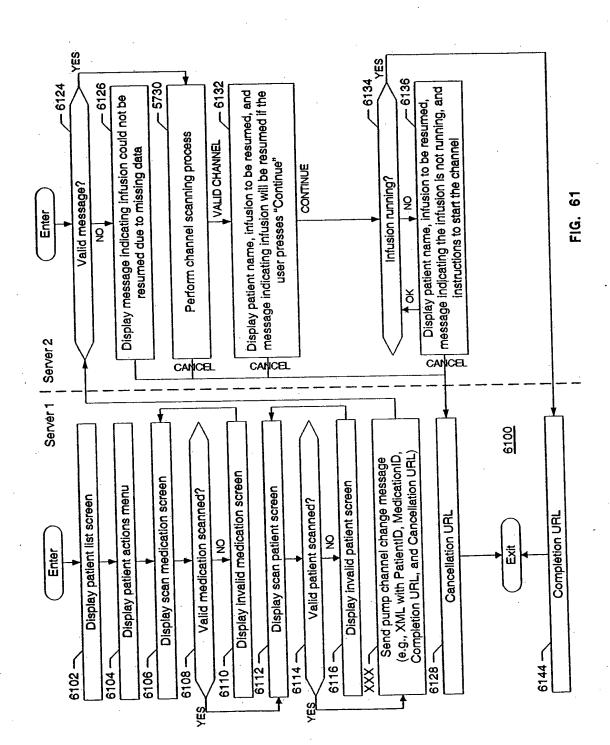
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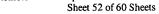


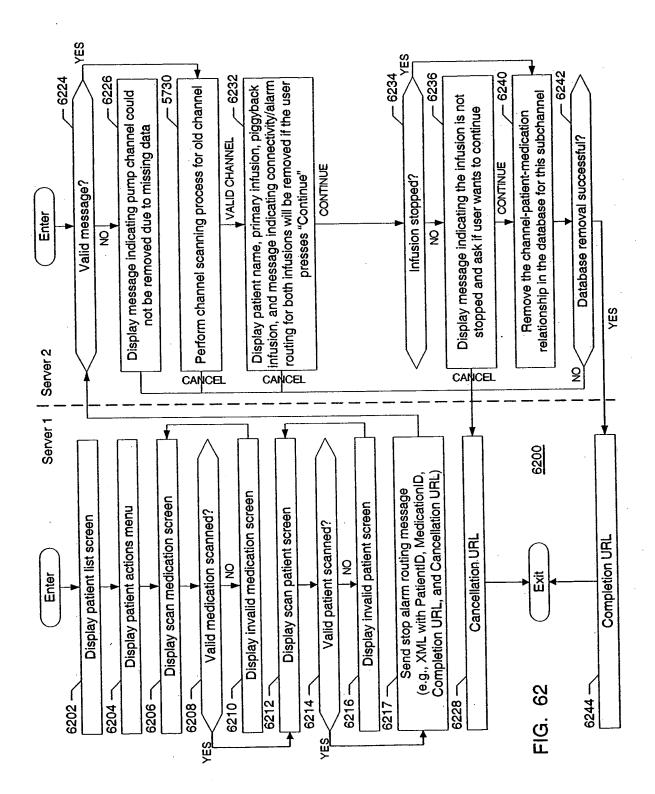


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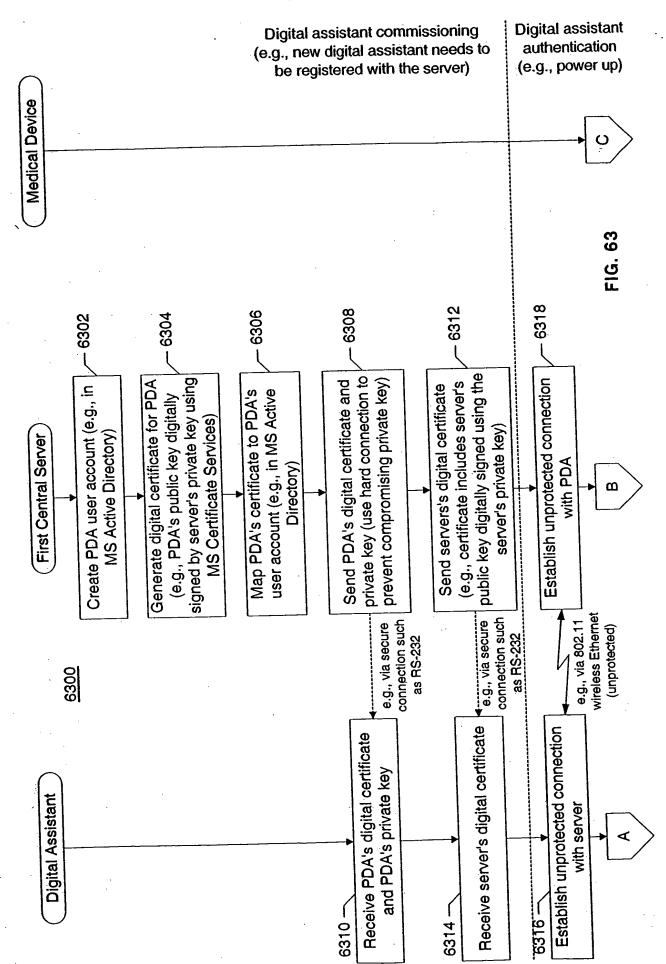
Title: Remote Multi-Purpose User Interface for a Healthcare System



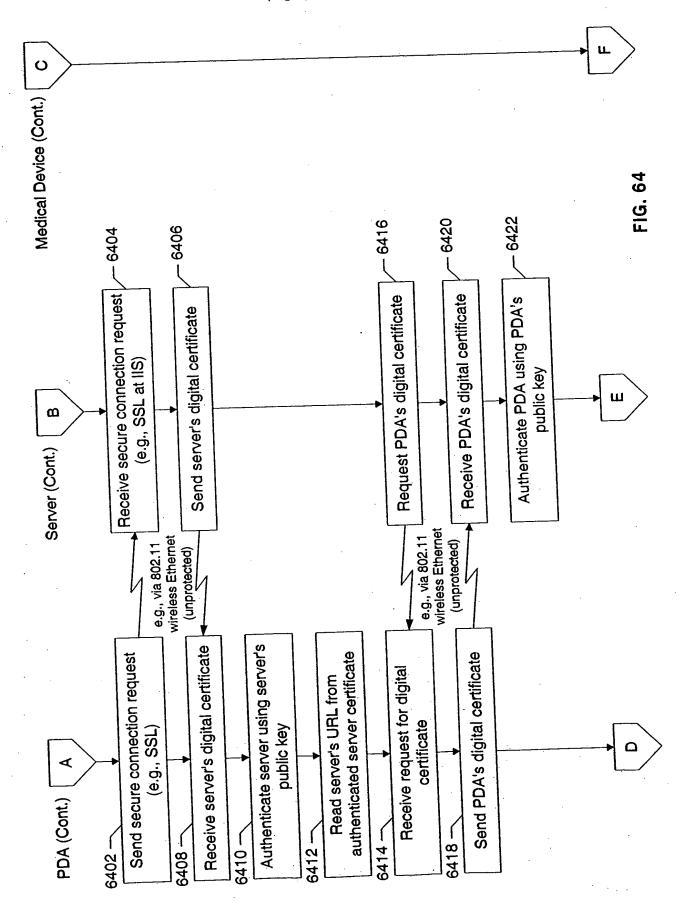


Title: Remote Multi-Purpose User Interface for a Healthcare System

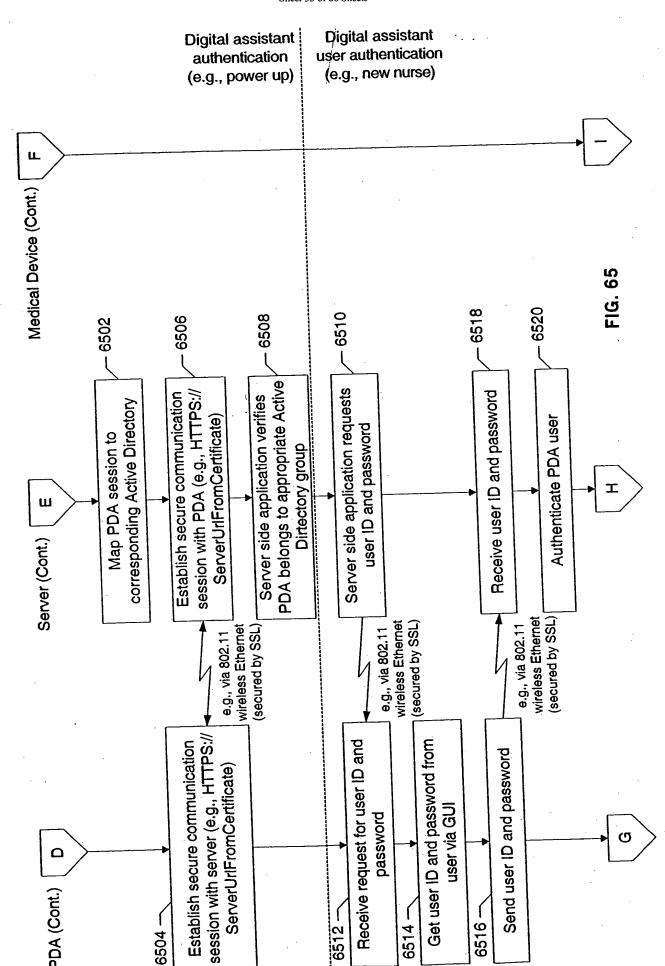
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Digital assistant authentication (e.g., power up)

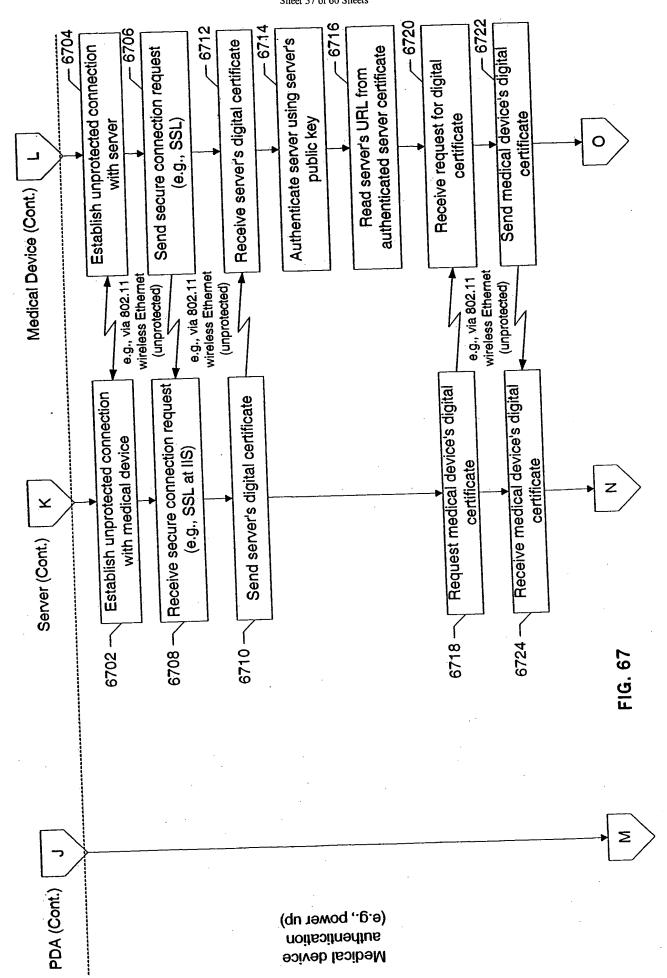


Title: Remote Multi-Purpose User Interface for a Healthcare System
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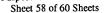


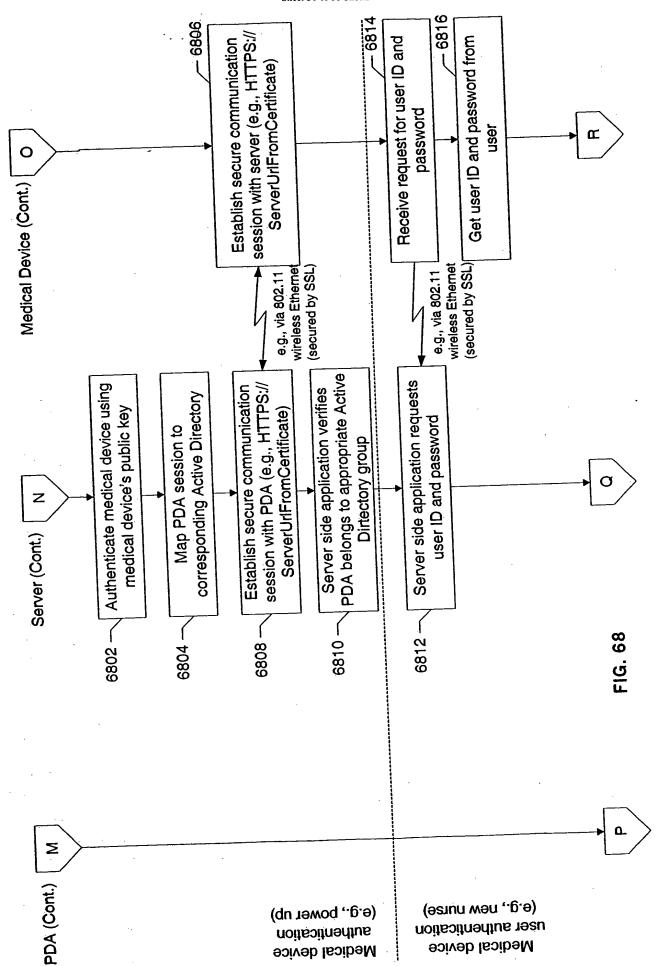
Title: Remote Multi-Purpose User Interface for a Healthcare System Sheet 56 of 60 Sheets -6614 6610 Receive server's digital certificate Receive medical device's digital certificate and private key Medical Device (Cont.) e.g., via RS-232 e.g., via RS-232 FIG. 66 public key digitally signed using the certificate and private key (use hard Map medical device's certificate to (e.g., certificate includes server's device's user account (e.g., in MS Send servers's digital certificate Send medical device's digital medical device (e.g., device's server's private key using MS Generate digital certificate for public key digitally signed by compromising private key) Create medical device user account (e.g., in MS Active connection to prevent server's private key) Certificate Services) Active Directory) Directory) Server (Cont.) 6612 8099 9099 6604 6602 PDA (Cont.) registered with the server) (e.g., new pump needs to be Medical device commissioning

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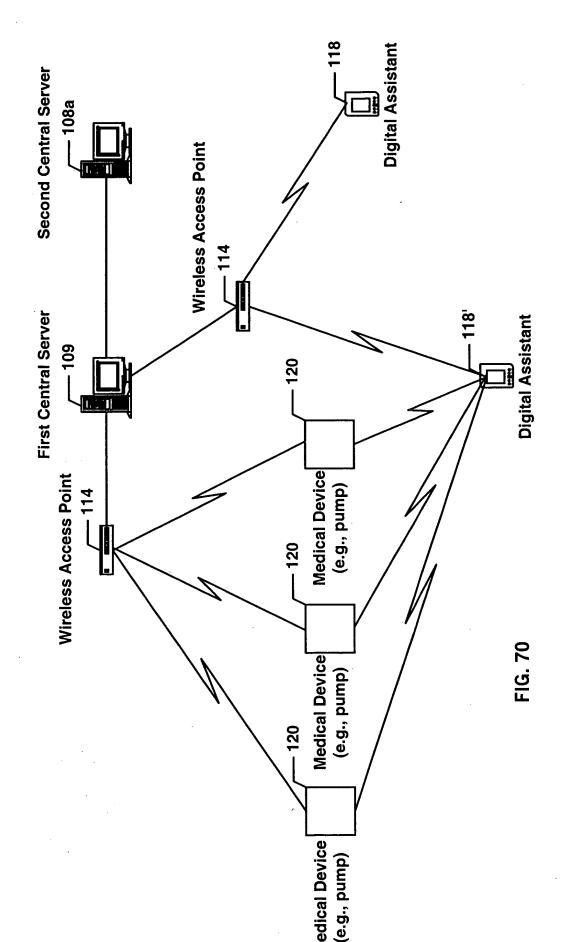


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